

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.21**WELDING WITNESS REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000102**Date Inspected:** 18-Jan-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Shanghai, China

**Witness:**      **Procedure Qualification Record**  
                    **Welding**                      **NDT**

**Welder Qualification**  
**Mechanical Testing, describe:**

**Fracture Critical****Index Lot #:** B31-016-07**Witness Lot #:** N/A**Bridge No:** 34-0006**Component:** N/A**Welder:** Zhu Hai Ping**ID #:** N/A**Joint Description:** Non Standard

N/A

**WPS ID #:** PWPS-B-T-3231-1

N/A

**Base Metal:** ASTM A709 Gr HPS485W

N/A

**PQR ID #:** HP2006126-3

N/A

**Thickness:** 75mm

N/A

**Process:** FCAW-G

N/A

**Electrode Spec/Class:** A5.20/E71T1-1

N/A

**Positions:** 2F

N/A

**Backing Material:**

N/A

**CWI:** Liu Liu, Ching Li Bin

N/A

**Average Amps:** 301.3

N/A

**AWS Code:** D1.5-2002

N/A

**Average Volts:** 29.1

N/A

**Applicable Sec:** 5.10

N/A

**Travel Speed:** 271.4mm/min

N/A

**Heat Input:** 1.94Kj/mm

N/A

**Preheat:** 160 C

N/A

**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector witnessed welding of a Procedure Qualification (PQR) test plate using gas shielded flux cored arc welding (FCAW-G) using Supercored 71H electrode, in the 2F (horizontal) position. The welding was performed per the AWS D1.5, 2002 Section 5.10 requirements. The welding appeared to comply with the contract documents. The PQR fillet weld test plate weld soundness test was performed in accordance with AWS D1.5-2002 paragraph 5.10.3 and the results were evaluated in accordance with AWS D1.5-2002 paragraph 5.19.3. Caltrans lot number B31-016-07 was assigned for tracking purposes.

**Summary of Conversations:**

At the completion of the welding the ZPMC QC inspector Mr. Liu Liu reported that the test plate was found to be acceptable in accordance with the contract documents.

**Observed welding,testing or results:** is in general conformance with the contract requirements.  
is not in conformance with the contract requirements.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural

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## WELDING WITNESS REPORT

( Continued Page 2 of 2 )

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Materials for your project.

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<b>Inspected By:</b>	Lanz,Joe	Quality Assurance Inspector
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<b>Reviewed By:</b>	Wright,Mark	QA Reviewer
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